DE 296 00 600 U1

Description

Instrument for transmitting geographical coordinates via mobile telephones

State of the Art

The US Department of Defense, DOD, operates a satellite-based navigation system. The system is known by the name Global Positioning System (GPS).

This system has been released for cost-free civilian use. With the aid of appropriate receivers it enables a precise ascertainment of geographical positions.

Problem

In the meantime, mobile telephones have become very widely used. With the aid of this technology it is possible for emergency messages to be transmitted even outside the range of a stationary telephone. As a rule, mobile telephones have the option of calling an emergency number free of charge.

The rescue control centre that is called will generally query the nature of the emergency and also the place of the emergency.

People seeking assistance who request help via a mobile telephone are, as a rule, not in their habitual environment. This results in great difficulties of position-finding. Particularly at night and in stressful

situations, a query of the present location is often very difficult and imprecise. This can lead to considerable delays in the emergency rescue.

Solution

The solution to this problem offers an instrument for transmitting geographical coordinates via mobile telephones. This instrument enables precise determination of the position of a person seeking assistance.

Advantages attained

The more quickly trained help arrives in an emergency, and the more information one has about the person who has got into difficulty, the easier it is to help that person.

Description of an exemplary embodiment

The instrument consists of:

a GPS satellite receiver for determination of position;

optionally, a longwave data receiver for increasing the precision of the determination of position (LW-DGPS);

a computer with memory.

In an emergency the person seeking assistance merely needs to press a button. Everything else is handled by the built-in computer: the position determined with the aid of the GPS receiver and with the optional longwave receiver is transmitted to the pre-programmed number of the rescue control centre together with a sender identifier.

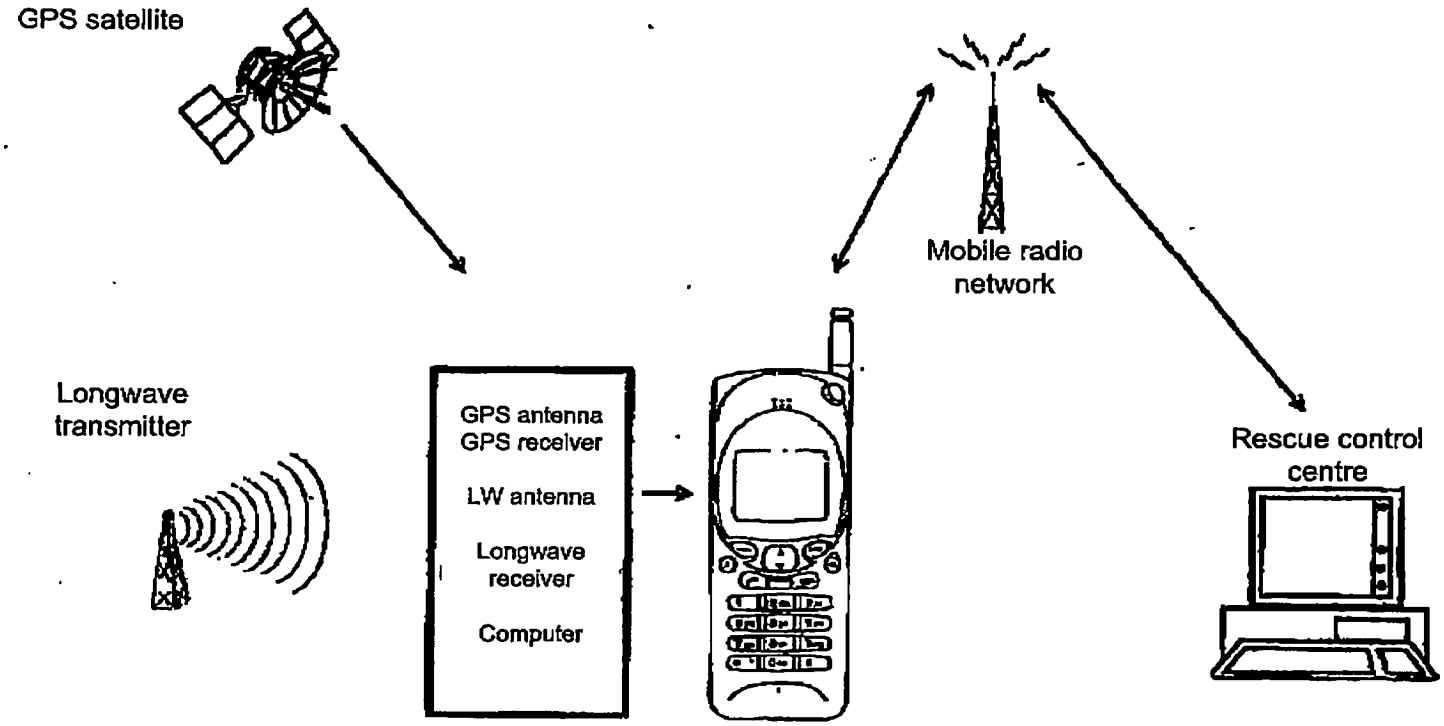
In addition to the transmission of the geographical coordinates and of the sender identifier, a voice contact is established automatically, via which the query of the emergency is undertaken.

In the rescue control centre the transmitted position is represented on an electronic map. The sender identifier is linked with data saved in a database. The data - such as, for example, blood group or previous illnesses etc. - are displayed. The manager of the rescue control centre informs the nearest rescue control station, which is ascertained via the positional data. This rescue control station takes measures appropriate to the emergency situation.

Re the Claims:

The instrument for transmitting geographical coordinates is permanently connected to the mobile telephone. Said instrument is accommodated between the mobile telephone and the battery of the mobile telephone. Power is supplied via the battery of the mobile telephone. The data of the instrument are transmitted via the serial interface of the telephone. The receive antenna for the satellite receiver is integrated on the front face of the mobile telephone.

Instrument for transmitting geographical coordinates via mobile telephones



CT COMMUNICATION TECHNOLOGY GmbH
Alzbacher Str. 16 b, 65350 Altomünster, Tel. 08254-2083 FAX -8654